Project:Possibility SunSPOT Project
Meeting Agenda
6:15 P.M. – 8:15 P.M. March 11th, 2008

Attendees:
Irina Abramova
Nikhilesh Kruthiventi
Sean Bachelder
Praveen Kansara
David Woollard
Winnie Yip

Minutes From Last Meeting:
Dave discussed the comments that the management made about the Concept Document (Status Update). The main comments that we need to address in the PDR are hardware issues and definition/constraint of gestures.

Dave suggested a schedule for the next week leading to PDR. He suggested that the prototype team work on the hardware issues that are described in further detail in the management plan and address the questions posed RE hardware in the reviews of the Status Update. These efforts should result in a prototype status document that we can reference at PDR.

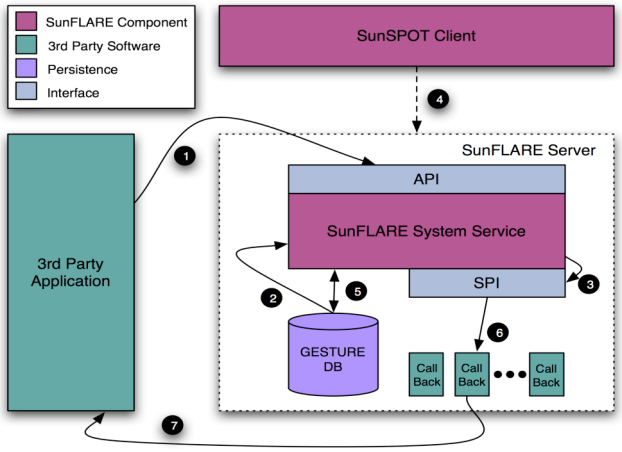
Dave suggested that the team members not on the prototype team be responsible for generating slides for the design section of the PDR. These slides should be generated by the end of the weekend. Next Tuesday, we will do a dry run of the presentation. While the presenter lineup has not been established, it makes a certain amount of sense that the slide contributors talk to their slides.

The group discussed the definition of a gesture and the methodology for specifying gestures. Dave proposed the following elements be combined in order to formulate gestures: lines, anchor points, anchor points with rotations, and anchor points with shaking. We decided that it did not make sense to allow more than two or three of these elements to be combining into gestures or the resulting gesture would be too hard to recreate.

We decided that there are two options for the user to specify gestures: assistive, based on the allowable gestures, and via a mouse. Depending on the abilities of the user, it is possible that an “assistance” that is capable of using a mouse be able to draw out the gestures that the user will make and associate the gesture with an action. For PDR, we will explore both of these options and create mockups and event sequences for both options. We might only be able to develop one option during the project, but we will design for both.

The team also discussed the need for the user to attempt the gesture multiple times before it is successfully stored as a gesture. After a gesture is describe via one of the two methods discussed above, the user will need to attempt the gesture and then the SunFLARE system service will need to figure out a scoring method that will: determine if the user can consistently repeat the gesture, determine that the gesture is identifiable via the gesture ID algorithm, and determine that is sufficiently different from other previously programmed gestures.

Dave discussed the Service Provider Interface design pattern that he proposed to use for the architecture of the plug-in components. Dave's drawing is reproduced below:



Dave proposed that Irina work to understand the SPI pattern and generate slides for each of the applications that we will develop in order to illustrate the callback interface. The three applications that we proposed to develop are: a virtual keyboard, a game (adaptation of one of the SS12 games), and a physical therapy program. Additionally, we will develop the API of the call-back to include both a method that returns a description of the action the callback implements and the a method to execute the action.

Nikhilesh gave a status update and discussed his research into the Hibernate framework vs. XML storage. Dave looked over the slides that Nikhilesh produced and decided to post them as an internal document of record on the wiki. Dave asked Nikhilesh to produce a side-by-side comparison on a single slide for the PDR.

Open Action Items:

Num	Description	Assignee
2	Become familiar with the software packages described in the Development Software Deployment Document	All
3	Install SunSPOTs Hardware	All

8	Finish infrastructure setup	Woollard
9	Get Gamepipe remote code	Praveen

Agenda:

1. Review PDR Materials	(Woollard)
2. Assign speaking roles	(Woollard)
3. PDR Run-through	(Woollard/All)

Action Items Closed In This Meeting:

Num	Description	Assignee
11	Development of trade study slide	Nikhilesh
12	Development of mockups & sequence slides	Sean
13	Development of 3rd party application slides w/ call-back specs	Irina
14	Answer hardware issues and write up prototype status update	Prototype team
15	Compile draft of PDR	Woollard

Action Items Resulting From This Meeting:

Num	Description	Assignee

Meeting Minutes: